General Assumptions

GPON fiber to the home

16:2:1 split (utilizing 2:1 headend split and distributed taps or 16:1 effective field splitters)

Calix E7 access equipment

Installations capitalized as short term asset

Battery backup installed on ONT at subscriber's expense

Heavy reliance on contractors for construction, installation, maintenance

Redundant 10 gigabit paths to internet

All passive network (no remote active cabinets)

No email offering

Strand and lash construction in power zone when necessary to avoid make ready

Partner to provide voice

Construction Assumptions

Miles main line distribution plant	3,474
% aerial	79%
Drops success based	Yes
Base cost per mile - underground	\$ 61,480
Labor per mile	\$ 47,520
Conduit	\$ 2,957
Fiber	\$ 2,140
Design and walkout	\$ 1,200
Peds and Vaults	\$ 2,640
Hardware	\$ 250
Splicing (not including taps/splitters)	\$ 900
Construction management	\$ 3,874
Materials management	\$ -
Base cost per mile - aerial	\$ 16,546
Labor per mile	\$ 9,240
Strand material cost per mile	\$ 739
Fiber average cost per mile	\$ 2,640
Design and walkout	\$ 1,200
Hardware	\$ 800
Splicing (not including taps/splitters)	\$ 1,100
Construction management	\$ 827
Materials management	\$ -
Make ready cost per mile (direct fiber)	\$ 3,000
Average OSP splitter cost per port (passing)	\$ 159
Cost per service drop	\$ 550
Homes and small businesses passed	36,633
Large businesses and cell towers passed	600
Initial res/bus customer take rate	35%

Initial large business take rate		10%		
Customer ramp period (months)		24		
Churn rate (per month)		0.2%		
New homes per year (%)		1.6%		
Penetration growth rate per year (after construction)		3.0%		
Maximum penetration		60.0%		
Interest rate on loans		3.8%		
Loan term in years		30		
Startup costs (legal, compliance, contracts, permitting)	\$	250,000		
Property taxes (% of NBV of property)	Ÿ	0.75%		
Maintenance per mile	\$	50.00		
Maintenance capex (% of distribution plant)	Y	0.3%		
Annual expense increases		3.0%		
Long term depreciation (years)		3.0%		
Mid term depreciation		10		
Short term depreciation		5		
Fiber lease charged to OE rate per mile per year	خ	3,100		
	\$ \$	58.30		
Lease rate charged to OE per service drop per year Lease rate annual escalator	Ş	3%		
	ċ	3,000		
Fiber lease rate per mile during construction	\$ \$	40.00		
Lease rate per service drop during construction	Ş	40.00		
Operating Entity Assumptions				
Operating Entity Assumptions				
	\$	_		
Video headend (if selected)	\$ \$	- 700.000		
Video headend (if selected) Routers, back office, marginal head-end and licenses	\$ \$ \$	- 700,000 66.89		
Video headend (if selected) Routers, back office, marginal head-end and licenses OLT electronics cost per splitter port	\$ \$ \$ \$	66.89		
Video headend (if selected) Routers, back office, marginal head-end and licenses OLT electronics cost per splitter port Blended video rate (includes equip)	\$ \$ \$ \$	66.89 84.07		
Video headend (if selected) Routers, back office, marginal head-end and licenses OLT electronics cost per splitter port Blended video rate (includes equip) Blended data rate	\$ \$ \$ \$ \$	66.89 84.07 60.57		
Video headend (if selected) Routers, back office, marginal head-end and licenses OLT electronics cost per splitter port Blended video rate (includes equip) Blended data rate Blended telephone rate	\$ \$ \$ \$ \$	66.89 84.07 60.57 38.14		
Video headend (if selected) Routers, back office, marginal head-end and licenses OLT electronics cost per splitter port Blended video rate (includes equip) Blended data rate Blended telephone rate Percent taking video		66.89 84.07 60.57 38.14 0%		
Video headend (if selected) Routers, back office, marginal head-end and licenses OLT electronics cost per splitter port Blended video rate (includes equip) Blended data rate Blended telephone rate Percent taking video Percent taking data		66.89 84.07 60.57 38.14 0% 100%		
Video headend (if selected) Routers, back office, marginal head-end and licenses OLT electronics cost per splitter port Blended video rate (includes equip) Blended data rate Blended telephone rate Percent taking video Percent taking data Percent taking a phone service		66.89 84.07 60.57 38.14 0% 100% 35%		
Video headend (if selected) Routers, back office, marginal head-end and licenses OLT electronics cost per splitter port Blended video rate (includes equip) Blended data rate Blended telephone rate Percent taking video Percent taking data Percent taking a phone service Video takerate annual decline		66.89 84.07 60.57 38.14 0% 100% 35% -1%		
Video headend (if selected) Routers, back office, marginal head-end and licenses OLT electronics cost per splitter port Blended video rate (includes equip) Blended data rate Blended telephone rate Percent taking video Percent taking data Percent taking a phone service Video takerate annual decline Phone takerate annual decline	\$	66.89 84.07 60.57 38.14 0% 100% 35%		
Video headend (if selected) Routers, back office, marginal head-end and licenses OLT electronics cost per splitter port Blended video rate (includes equip) Blended data rate Blended telephone rate Percent taking video Percent taking data Percent taking a phone service Video takerate annual decline Phone takerate annual decline Blended bundle discount per connect	\$	66.89 84.07 60.57 38.14 0% 100% 35% -1% -1%		
Video headend (if selected) Routers, back office, marginal head-end and licenses OLT electronics cost per splitter port Blended video rate (includes equip) Blended data rate Blended telephone rate Percent taking video Percent taking data Percent taking a phone service Video takerate annual decline Phone takerate annual decline Blended bundle discount per connect Large customer retail rate (blended)	\$	66.89 84.07 60.57 38.14 0% 100% 35% -1% -1%		
Video headend (if selected) Routers, back office, marginal head-end and licenses OLT electronics cost per splitter port Blended video rate (includes equip) Blended data rate Blended telephone rate Percent taking video Percent taking data Percent taking a phone service Video takerate annual decline Phone takerate annual decline Blended bundle discount per connect Large customer retail rate (blended) Annual increase - retail (not video)	\$ \$ \$	66.89 84.07 60.57 38.14 0% 100% 35% -1% -1% - 350.00 0.0%		
Video headend (if selected) Routers, back office, marginal head-end and licenses OLT electronics cost per splitter port Blended video rate (includes equip) Blended data rate Blended telephone rate Percent taking video Percent taking data Percent taking a phone service Video takerate annual decline Phone takerate annual decline Blended bundle discount per connect Large customer retail rate (blended) Annual increase - retail (not video) Fee per installation (contribution)	\$	66.89 84.07 60.57 38.14 0% 100% 35% -1% -1% - 350.00 0.0% 100		
Video headend (if selected) Routers, back office, marginal head-end and licenses OLT electronics cost per splitter port Blended video rate (includes equip) Blended data rate Blended telephone rate Percent taking video Percent taking data Percent taking a phone service Video takerate annual decline Phone takerate annual decline Blended bundle discount per connect Large customer retail rate (blended) Annual increase - retail (not video) Fee per installation (contribution) Annual increase - video rates	\$ \$ \$	66.89 84.07 60.57 38.14 0% 100% 35% -1% -1% - 350.00 0.0%		
Video headend (if selected) Routers, back office, marginal head-end and licenses OLT electronics cost per splitter port Blended video rate (includes equip) Blended data rate Blended telephone rate Percent taking video Percent taking data Percent taking a phone service Video takerate annual decline Phone takerate annual decline Blended bundle discount per connect Large customer retail rate (blended) Annual increase - retail (not video) Fee per installation (contribution) Annual increase - video rates Potential annual CAF Subsidy	\$ \$ \$ \$	66.89 84.07 60.57 38.14 0% 100% 35% -1% -1% - 350.00 0.0% 100 4.0%		
Video headend (if selected) Routers, back office, marginal head-end and licenses OLT electronics cost per splitter port Blended video rate (includes equip) Blended data rate Blended telephone rate Percent taking video Percent taking data Percent taking a phone service Video takerate annual decline Phone takerate annual decline Blended bundle discount per connect Large customer retail rate (blended) Annual increase - retail (not video) Fee per installation (contribution) Annual increase - video rates Potential annual CAF Subsidy Blended Video Cost	\$ \$ \$ \$ \$	66.89 84.07 60.57 38.14 0% 100% 35% -1% -1% - 350.00 0.0% 100 4.0% - 66.70		
Video headend (if selected) Routers, back office, marginal head-end and licenses OLT electronics cost per splitter port Blended video rate (includes equip) Blended data rate Blended telephone rate Percent taking video Percent taking data Percent taking a phone service Video takerate annual decline Phone takerate annual decline Blended bundle discount per connect Large customer retail rate (blended) Annual increase - retail (not video) Fee per installation (contribution) Annual increase - video rates Potential annual CAF Subsidy Blended Video Cost Blended telephone cost	\$ \$ \$ \$	66.89 84.07 60.57 38.14 0% 100% 35% -1% -1% - 350.00 0.0% 100 4.0% - 66.70 9.22		
Video headend (if selected) Routers, back office, marginal head-end and licenses OLT electronics cost per splitter port Blended video rate (includes equip) Blended data rate Blended telephone rate Percent taking video Percent taking data Percent taking a phone service Video takerate annual decline Phone takerate annual decline Blended bundle discount per connect Large customer retail rate (blended) Annual increase - retail (not video) Fee per installation (contribution) Annual increase - video rates Potential annual CAF Subsidy Blended Video Cost	\$ \$ \$ \$ \$	66.89 84.07 60.57 38.14 0% 100% 35% -1% -1% - 350.00 0.0% 100 4.0% - 66.70		

Annual telephone increases		0.0%
Head end and electronics maintenance per year as % of value		2.0%
Base bandwidth, data and video transport per month	\$	12,000
Base bandwidth capacity (Mbps)	*	4,096
Over subscription ratio N:1		250
Reserved bandwidth per large commercial data cust		20
Cost per incremental Mbps	\$	2.00
Growth rate of cost per Mbps	Y	-0.5%
Annual bandwidth growth per customer		3.0%
Interest rate on loans		3.9%
Term in years		20
Years of loan that are interest only		1
Increase in install fee after const	¢	50.00
Introductory promotion monthly value	\$ \$	-
Introductory promotion period in months (MAX 12)	Ÿ	0
Startup costs (legal, compliance, contracts, permitting)	\$	150,000.00
Property taxes (% of NBV of property)	Ą	130,000.00
	\$	25.00
Marketing per new passing	Ş	0.5%
Bad debt (% of revenue)	خ	
Utilities (per month)	\$ \$	3,000
Average new vehicle price	\$	60,000.00
Vehicle life in years	.	6
Vehicle repairs/fuel (each/month)	\$	600.00
Annual expense increases		2.0%
Other operating expense (% revenue)		0.3%
Maintenance capex (% of distribution plant)		0.3%
Long term depreciation (years)		30.00
Mid term depreciation		10.00
Short term depreciation		5.00
Expected income tax rate (federal, state, and local)		39%
Average installation cost per connect	\$	140
Set top box - HD - cost per box	\$	-
Set top box - HD/DVR - cost per box	\$ \$ \$ \$ \$	-
Set top box - HD - boxes per video customer	\$	-
Set top box - HD/DVR - boxes per home	\$	-
Head end license fee per subscriber	\$	-
Install materials (in-house) - per install		50
ONT cost	\$	205
Annual price increases		0.0%
Technical average annual salary	\$	65,000
Marketing average annual salary	\$	65,000
Average number of subscribers per technician		2500
Average technician salary	\$	45,000
Average number of subscribers per CSR		2500
Average CSR salary	\$	35,000

Administrative positions in year 1	5
Capex per new employee	\$ 5,000
Travel expenses (per administrative position)	\$ 5,000